

**ALLOY COMPOSITION SUITABLE FOR
MOLTEN MAGNESIUM ENVIRONMENTS**

Abstract of the Disclosure

A castable and machinable alloy suitable for submersion in a molten magnesium or magnesium aluminum melt has the following composition:

	ELEMENT	CONTENT (weight %)
5	Boron	0.01 - 2.0
	Carbon	0.01 - 2.0
	Sulphur	Trace
	Phosphorus	Trace
	Chromium	5.0 - 15.0
10	Silicon	0.0 - 2.0
	Molybdenum	2.00 - 12.00
	Tungsten	0.5 - 10.00
	Vanadium	0.5 - 5.0
	Niobium	0.5 - 5.0
15	Cobalt	0.5 - 10.0
	Iron	Balance

The alloy is resistant to dissolution by the melt at temperatures of up to around 1800°F.